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An economic and labor market analysis of the State of Utah

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In addition to tracking noncustodial parents, the New Hire Registry also provides a wealth of socio-economic information.

New Hiring Still Recovering Recession Losses



NATALIE TOROSYAN, ECONOMIST

hile recessions can be caused by various economic anomalies, they often lead to a common outcome: less hiring. As employers experience the crunch of a contractionary economy, new hiring can be put on hold. This often translates to rising rates of unemployment or underemployment during recessions. New graduates might emerge into a drastically limited economic environment and those currently employed may have fewer opportunities to change jobs. Moreover, a prolonged decrease in demand for labor is typically accompanied by lower wages offered.

Was new hiring limited in Utah during the recession? And if so, how much did earnings change? Those questions can be analyzed using U.S. Census Bureau Local Employment Dynamics data on stable new hires, which it defines as workers who started a job they had not held within the past year and stayed in the job for at least a full quarter. This also includes their average monthly earnings. There is always an element within the economy that rapidly moves from job to job. Then there are those who attach and stick with a job. The latter is more representative of the greater economy, and in order to evaluate the underlying trend, only stable new hires are evaluated here. The data used in this analysis includes jobs in the private and public sectors (except federal which is not available) for workers ages 14 to 99,

unless noted otherwise, and is seasonally adjusted. Average monthly earnings have been adjusted for inflation using second quarter 2012 dollars.

New Hiring and Earnings in Utah

The year-over change in new hiring peaked in 2007 after four years of expansion. In a downturn corresponding to the recession, which was from December 2007 to June 2009, year-over growth rates of hiring began to plunge as demonstrated by the plots of year-over change rates of new hires and earnings in Figure 1. The year-over change reached as low as negative 24 percent. From the new hires peak in 2007 to the 2009 trough, new hiring in the state fell by over 122,000 jobs, or approximately 29 percent (Figure 2). One of the developments that signals a labor market is recovering is an increase in new hires. After 11 quarters of declining new hire activity, hiring bottomed out in 2009 and reestablished growth in 2010. Almost one-fourth of lost annualized hiring was recovered. New hiring in 2011 was just over 338,000, 79 percent of the peak level.

The highest volume of quarterly new hiring was from the retail sales sector for 39 out of 45 quarters from first quarter 2001 to second quarter 2012. Another industry with high volumes of new hires was accommodation and food services.

While new hiring was still growing, earnings of new hires peaked in 2006 at



New Hiring Still Recovering Recession Losses (continued)

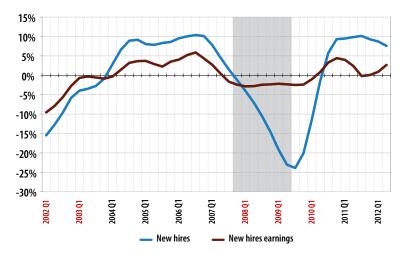
which point the year-to-year growth rate of earnings slowed before turning negative, just one quarter prior to the recession. During the economic slump, earnings decreased but by no more than 2.9 percent year-over, a fraction of the plunge that the quantity of new hires took. The "sticky" wages failed to decay at proportionate rates even while the deterioration of new hires year-to-year growth rates reached unprecedented lows. The rapidly declining year-over rates for hiring did not subside until one quarter after the recession officially ended.

About half of Utah's industrial sectors began recovering new hires in 2009, but by 2011, no sector had fully recovered peak level hiring. The sector nearest its prerecession peak was administrative, support, waste management and remediation services, which reached 92 percent.

The largest volume of lost jobs were in construction, retail trade and manufacturing, which fell by over 18,000 new hires each. In terms of percent of declined new hires from peak to trough, construction fell by over 55 percent, retail trade by 33 percent and manufacturing by 52 percent. Interestingly, because of the sheer volume of new hiring that takes place in retail trade, even such a large decrease did not qualify it as a sector with a comparatively high percentage of new hires lost. Those industries are listed in Figure 3.

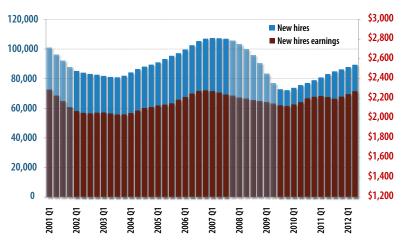
New hires in the utilities sector in 2010 were 54 percent less than in 2007. From its peak in 2007 to its trough in 2009, new hiring in mining, quarrying and oil and gas extraction was cut by 2,600, resulting in 52 percent fewer new hires. That sector has

Figure 1. Year-Over Growth Rates of New Hires and New-Hire Earnings



Red quarterly axis labels indicate a negative year-over-year percentage change in either new hires or new-hire earnings. Shaded region represents quarters with at least one month in economic recession according to the National Bureau of Economic Research (NBER) Source: U.S. Census Bureau. Quarterly Workforce Indicators Data. Longitudinal-Employer Household Dynamics Program; NBER

Figure 2. Utah Quarterly New Hires and Earnings, 2001Q1 to 2012Q2



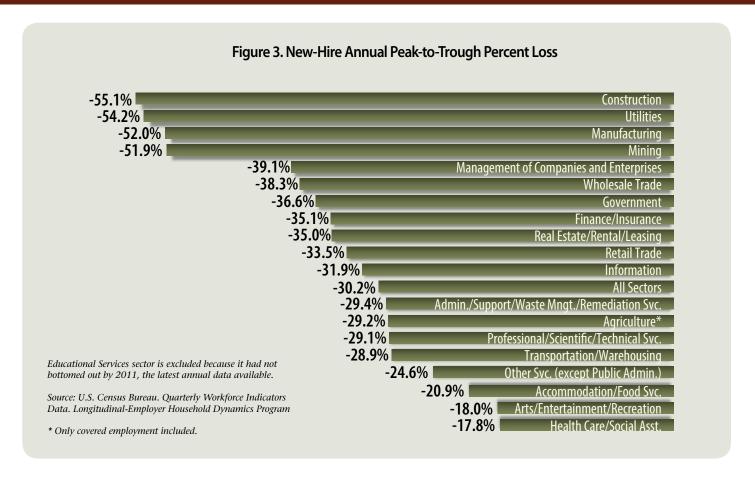
Lighter shading indicates that a recession month fell in that quarter Source: U.S. Census Bureau. Quarterly Workforce Indicators Data. Longitudinal-Employer Household Dynamics Program

historically offered comparatively high new hires earnings, thus impacting the overall earnings loss.

Real earnings and hiring both dropped during the recession (Figure 2). Compared to the previous recession in 2001, new hire earnings loss was less severe (3.7 percent loss compared to 7.7 percent earlier) but the

new hiring cutback was steeper (27.3 percent loss compared to 12.9 percent previously). Between first quarter 2001 and second quarter 2012, hiring fell by 11 percent and after the ebb and flow, earnings registered 0.8 percent lower.

Generally, decreased new hire earnings during the recession accompanied slower hiring. In



some industries, however, year-to-year new hire earnings continued to grow while year-over hiring plummeted. One such sector is construction. In construction, hiring began to decrease during the recession but earnings grew during most quarters of the recession. This inverse relationship continued even after hiring growth resumed in the second quarter of 2010; soon after year-over earnings began to decline for the first time since the recession.

What accounts for the inverse tendencies between new hires and new hires earnings that were observed in these sectors? An explanation might be found in examining who was, and was not, hired by these sectors. Separating new hires in construction by education reveals that, although hiring decreased for all education levels, hiring for those with less than a high school education experienced the most prolonged decline during and after the recession. Individuals in this category of educational attainment tend to receive the lowest earnings. When hiring for this group decreased relative to all other groups,

average aggregate earnings increased in comparison to the previous year when larger numbers from this low-education group were hired. Likewise, when new hiring picked back up, more individuals with less than a high school education were hired or rehired relative to other education levels. This caused average aggregate earnings for all education levels to decrease in comparison to periods when fewer individuals with less than a high school education were being hired.

Differences by Gender

How the different genders engage in the labor market has changed over time, particularly during the recession. From first quarter 2001 to first quarter 2006, the new hires male to female ratio, which measures the share of male new hires compared to females, was on the rise, indicating that the workforce increasingly consisted of a larger share of men. After that point, it declined until the end of the recession. Men were disproportionately affected because the largest numbers of new hires lost during the recession were in construction and

manufacturing, two of the most male-dominated sectors. The share of male to female new hires dropped to its lowest level of the decade. Once the recession ended, however, the old relationship between genders in the overall economy started to return, and by the fourth quarter of 2010 males constituted the largest new hires share of the past decade.

Average annual earnings for male new hires grew at a compounded annual rate of 0.2 percent from 2001 to 2011. For females, the rate was negative 0.5 percent. Before the recession, from 2002 to 2006, earnings grew at 2.5 percent for males and 1.8 percent for females. The biggest blow to new hires earnings came between 2007 and 2009. During that time, the growth rates were negative 2.5 percent and negative 1.9 percent for males and females, respectively. Once the recession ended, males saw new hire earnings begin to grow again, but earnings for females continued to decline.

When new hires are separated by gender, there are some variations of sectors with the



New Hiring Still Recovering Recession Losses (continued)

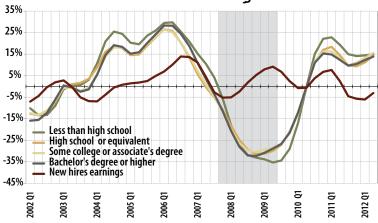
highest levels of new hires. For females, retail trade and health care and social assistance topped new hires by sector since 2001, while new hires for males were highest in the construction and retail trade sectors.

Although the sectors that lost the highest rates of new hires were male-dominated fields, within those fields, females represented a larger proportion of the loss than males, even though their numbers in those sectors were small. Construction lost 55 percent of new hires from its peak to trough, but for females that loss was 62 percent. And while males had recovered about 16 percent of the decline by 2011, female new hires had only recovered 8 percent. When the entire manufacturing sector's new hires lost 52 percent of its volume from its peak in 2007 to its trough in 2009, the loss for female new hires was greater at 56 percent (compared to 50 percent for males). New hires in manufacturing for men have recovered 39 percent of what was lost but that rate is only 18 percent for females.

The Role of Education

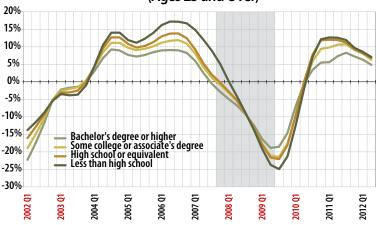
Before the recession, the highest yearover growth rates of new hires were for individuals with less than a high school education. (The education analysis only considers workers ages 25 and over). This trend continued after the end of the recession, even though individuals in this educational attainment group were most affected by hiring declines during the economic downturn (Figure 5). From its hiring peak to its lowest point, this group lost 29 percent of hiring, the highest among all of the educational attainment categories. This group experienced high rates of postrecession hiring, which is expected after the huge losses during the recession. At

Figure 4. Construction Year-Over Growth of New Hires (by Education) and New-Hire Earnings



Lighter shading indicates that a recession month fell in that quarter Source: U.S. Census Bureau. Quarterly Workforce Indicators Data. Longitudinal-Employer Household Dynamics Program; NBER

Figure 5. Year-Over Growth of New Hires by Education (Ages 25 and Over)



Lighter shading indicates that a recession month fell in that quarter Red quarterly axis labels indicate a negative year-over-year percentage change within any educational attainment category. Source: U.S. Census Bureau. Quarterly Workforce Indicators Data. Longitudinal-Employer Household Dynamics Program; NBER

all educational levels, hiring for males has recovered faster than for females.

The only educational levels to experience increased inflation-adjusted new hires earnings between first quarter 2001 and second quarter 2012 are high school diploma (or equivalent) and less than a high school education; real earnings declined for all else.

Conclusion

The state is still recovering from the recession-related new hires losses. The economic downturn changed the nature of new hires, which was a direct consequence of the types of jobs lost. New hires in

postrecession Utah were likely to be male and less educated, traits that also describe those most hurt during the recession.

Earnings of overall new hires were slightly negative from 2001 through the second quarter of 2012, with internal fluctuations within the educational attainment levels and between genders. While the volume of new hires and the levels of new hires earnings are still below their prerecession levels, year-over growth rates resemble those before the downturn and indicate continued recovery.



Utah's Economic Recovery Pushes On

BY MARK KNOLD, SENIOR ECONOMIST

tah's economic recovery from the recent Great Recession continues. The recession's official start was late 2007, but the more intense phase began in late 2008 when the stock market collapsed. We are approaching the five-year anniversary of that stock market drop and the corresponding year-and-one-half state and national employment decline. The Utah economic recovery began in early 2010, so we are three and one-half years beyond that. So how is Utah doing? The answer is "fairly well," considering the depth of the Utah employment decline and the pace of rebound relative to how poorly many other states have recovered.

The overall United States employment rebound is quite lackluster. Since World War II, no recession has been more stubborn in producing an employment rebound than the most recent one. Current employment levels are still two-percent lower than the pre-recession peak of five and one-half years ago. The average post-World War II employment recovery from previous peak to reclaiming that peak has been one and one-half years. We are currently four years beyond that average.

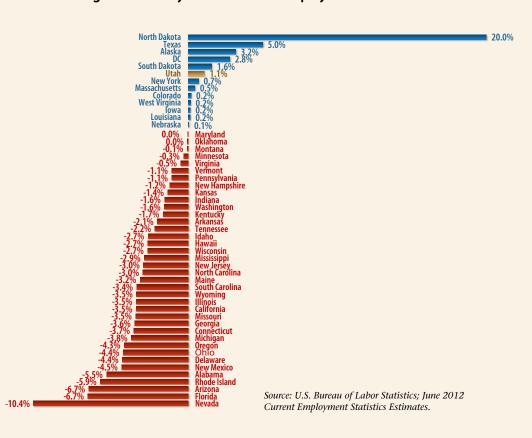
Fortunately, Utah is recovering at a faster pace. Utah is beyond its previous peak employment and expanding its employment base to new heights. Utah re-attained its pre-recession employment peak in late 2012. Since then, it has grown an additional 1.0 percent. In the process of achieving this, Utah's employment growth over the past

12 months is right around Utah's long-term average yearly growth rate of 3.1 percent, so the Utah economy is currently performing along lines familiar to its past.

Utah is one of only 13 states (including the District of Columbia) that have re-attained or

surpassed pre-recession employment (Figure 6). The top three have strong ties to the energy industry, where new development and oil/gas extraction technologies have led these state's movement out of recession. Others are tied to government spending (like D.C.), and some

Figure 6. State by State Recession Employment Rebound





had little recession decline and therefore not much ground to make up (like South Dakota). Utah, though, did have a sharp employment decline of 7.3 percent from previous peak employment to the low point of the recession (the national average decline was 6.5 percent). Of all the states that have surpassed their previous peak employment, no state, on a percentage basis, had as much ground to make up as Utah.

As mentioned, Utah is currently expanding employment right around its average of 3.1 percent. But if the government sector was removed and we looked just at private sector employment (which is 82 percent of all Utah employment), then Utah employment growth would be even better—just over 4.0 percent.

Nearly all of Utah's industrial sectors are increasing employment. On the private sector side, the only exception is mining where the recent oil and gas expansion activities in the Uintah Basin seem to have reached their apex, coupled with coal mining losses in Utah's central counties. Together these bring mining employment down by roughly 3.0 percent over the past year. However, to keep that in perspective consider that mining is not a large employment sector in Utah and these losses only amount to 400 Utah jobs.

Construction employment is expanding again in Utah after a hard recession decline. Utah's housing market appears to have shaken most of its recessionary hurdles, and with an ever expanding population base in Utah, housing demand is reviving. Construction is responding similarly.

Most other industrial sectors in Utah are significantly growing employment. The large professional and business services sector has grown by 5.8 percent over

Figure 7

Utah Information Technology/Software Core Industry Group	
NAICS Code	Title
511210	Software Publishers
517110	Wired Telecommunications Carriers
517210	Wireless Telecommunications Carriers
517410	Satellite Telecommunications
517919	All Other Telecommunications
518210	Data Processing, Hosting, and Related Services
519130	Internet Publishing and Broadcasting and Web Search Portals
541511	Custom Computer Programming Services
541512	Computer Systems Design Services
541513	Computer Facilities Management Services
541519	Other Computer Related Services
Information	n Technololgy Supporting Industries
334111	Electronic Computer Mfg.
334112	Computer Storage Device Mfg.
334118	Computer Terminal and Other Computer Peripheral Mfg.
334210	Telephone Apparatus Mfg.
334220	Radio and Television Broadcasting
	and Wireless Communications Equip. Mfg.
334290	Other Communications Equipment Mfg.
334310	Audio and Video Equipment Mfg.
334412	Bare Printed Circuit Board Mfg.
334413	Semicondictor and Related Device Mfg.
334416	Electronic Coil, Transformer, and Other Inductor Mfg.
334417	Electronic Connector Mfg.
334418	Printed Circuit Assembly Mfg.
334419	Other Electronic Component Mfg.
334614	Software and Other Prerecorded Disc, Tape, and Record Reproducing
425110	Business to Business Electronic Markets
454111	Electronic Shopping
454112	Electronic Auctions

Note: The North American Industry Classification System (NAICS) code is the federal government industry classification standard.

the past year. Leisure and hospitality employment is up 5.1 percent. Financial activities employment has expanded by 4.6 percent, the information sector 4.3 percent, and private education and health care 4.2 percent. All in all, employment growth is currently vibrant in Utah.

Government is showing minimal employment gains over the year of 0.5 percent. The federal government component is down 3.2 percent and is a significant part of holding down overall government employment growth. Local government employment is holding even. State government employment is up by nearly 3.0 percent, with most of that in higher education. The cumulative

Utah Life Science Core Industry Group This Life Science Core can be presented as segmented subsets NAICS Code Biotechnology 325411 Medicinal & Botanical Manufacturing 325413 In-Vitro Diagnostic Substance Manufacturing 325414 **Biological Product Manufacturing** 541711 R & D in Biotechnology Pharmaceutical Preparation Manufacturing R & D in Life Sciences 541711 R & D in Biotechnology * 541712 R & D in the Physical, Engineering, and Life Sciences **Medical Devices** Electromedical and Electrotherapeutic Apparatus Mfg. 334510 334516 Analytical Laboratory Instrument Mfg. 339112 Surgical and Medical Instrument Mfg. 339113 Surgical Appliance and Supplies Mfg. Dental Equipment and Supplies Mfg Ophthalmic Goods Mfg. 339114 339116 Dental Laboratorie Pharmaceutical Research & Clinical Services 621492 Kidney Dialysis Centers 621512 Diagnostic Imaging Centers Environmental, Agricultural Technology, Remediation Pesticide and Other Agricultural Chemical Mfg. **Environmental Consulting** 541620 562112 562211 Hazardous Waste Treatment and Disposal Remediation Services 562910 562920 Materials Recovery Facilities

* Qualifies in two areas, but is to be counted only once.

effect is a small amount of government employment growth.

The Utah unemployment rate is still a bit elevated around 5.0 percent, and that is one of the lingering byproducts of the recession. As mentioned, Utah's employment count has passed its pre-recession peak of 2007, but the Utah labor force has grown considerably in the past five years. With the net effect of only a minimal amount of employment growth between 2007 and now, there haven't been enough jobs created to absorb Utah's additional labor force growth, resulting in an elevated unemployment rate.

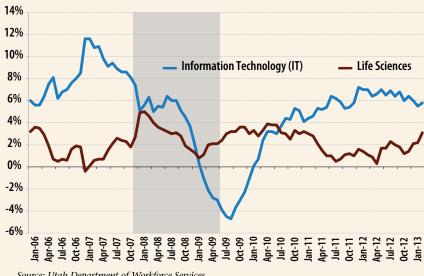
The economy was recently evaluated using standard industrial definitions (or classifications) established by the federal

government. These standard industry classifications allow for uniform designation and measurement across the country. For example, when Texas talks about its manufacturing sector it is defined the same way as when Utah talks about its manufacturing sector. Yet it is possible to get outside of these standardized industrial classifications and make "hybrid" classifications. Hybrid means taking bits and pieces of the standard industry classifications and re-assembling them as an alternative (and customized) look at the economy. Examples would be "industries" such as information technology, life sciences, or aerospace. These are industry names used and promoted by many state economic development agencies. Yet these hybrid assemblages come with a weakness due to a lack of a standard industry definition. Since these industries are custom built, how Utah defines its information technology sector may be different than how Texas defines its information technology classification. Comparisons among different state hybrid industries are therefore unreliable.

Utah has established an information technology (IT) definition (Figure 7). It includes segments such as software publishing, telecommunications, data processing, computer programming and design services. It also includes areas of the manufacturing sector that support or build IT products, like computers or circuit boards. The definition also includes those whose businesses function uniquely because of information technology, like electronic auctions or online shopping services.

In Utah, the IT sector is quite vibrant. It employs around 50,000 workers, or 4.0 percent of the state's jobs. The most recent 12-month breakdown shows it has grown

Figure 8. Utah Information Technology and Life Sciences **Employment Change, 2006 to 2013**



Source: Utah Department of Workforce Services

by nearly 6.0 percent. Outside of the down period during the recession's slide in 2009 into early 2010, employment growth rates of this level in Utah are largely the norm for this industry. Currently, Utah County stands out as a bright spot with employment growth over 5.5 percent. One reason for this growth is a vibrant IT sector in the county, as its employment growth has been around 9.0 percent over the past year.

Another hybrid sector that gets attention in Utah is life sciences (Figure 7). It includes constituents like biotechnology development and research, pharmaceuticals, medical equipment and more. It is not a large sector in Utah, making up around 2.0 percent of all employment, and it is not seeing growth like the IT sector. The most recent overthe-year employment growth is around 3.0 percent. However, this sector rode

through the recession years without any employment losses in Utah.

Summary

Utah is recovering as well as can be expected from its recent recession setback. Few states can point to the type of employment rebound that Utah has seen. Utah is moving forward with a solid employment base to grow upon, as nearly all industries fueled by the private sector are vibrant in Utah. The recent federal government sequestration may have put a slight damper in Utah's employment growth this summer, but not much is expected there or to linger, so the stage should be set for more generous Utah employment growth into next year.



Utah Department of Workforce Services Workforce Research and Analysis (WRA) Division Equal Opportunity Employer/Programs

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utahinsights

Executive Director: Jon Pierpont

Director, WRA: Carrie Mayne

Designers: Pat Swenson and Leonard Miller

Statewide Economists:

Mark Knold • mknold@utah.gov

(801) 526-9458

Natalie Torosyan • ntorosyan@utah.gov

(801) 526-9728

To subscribe or request a copy, please call: 801-526-9785

The Benefits of New Hire Registry

BY MELAUNI IENSEN, LMI ANALYST

ll employers in the United States are required by federal law to Areport information about all newly hired employees to their designated state agency. In 1997, the Department of Workforce Services was given the responsibility of managing the New Hire Registry Act for Utah, where employers must report the information within 20 days of a new hire's first day. The primary purpose of this law was the result of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996, an all-inclusive bipartisan welfare reform system aimed at ending the federal entitlement to assistance, and whose main reform was the start of the Temporary Assistance for Needy Families (TANF) program. Both TANF and the New Hire's Registry were to be designed in such a way to promote work, responsibility and self-sufficiency in an effort to strengthen families.

You may wonder what reporting new hires has to do with child support reforms. Before 1997, when a parent was ordered to pay child support, this amount was taken out of the worker's paycheck by the employer through wage withholding orders. If a worker changed or found new employment, it could take months for the orders to follow to their new employer. Reporting new hire data provided the ability to track those non-custodial parents in a more timely fashion, thus reducing the lag of payments to the custodial parent. This ties in with the fixed work requirements under PRWORA that custodial parents receiving public assistance are to fulfill.

Aside from the immediate purposes stated above, the nature and scope of the data gathered provides a wealth of socio-economic information.

Because reporting includes demographic and geographic information as well as standard information about the employer reporting the new hire, new hire data can answer such questions as which industries are hiring the most workers and which occupations are growing. Analysts can track the hiring patterns of old and young workers and male and female new hires, all by various geographical groupings.

Since its legislation, the initiative has significantly improved child support payments and collections while decreasing the payment and reporting time lags of custodial parent workers moving from one employer to the next. In addition, the registry has helped to detect and prevent fraud in other assistance programs. Cases can be matched between the New Hire Registry and Unemployment Insurance, Food Stamps and other programs associated with TANF which are under the PRWORA provision. Cases can even be matched to other programs like Medicaid in the detection and prevention of overlooked benefits usage in multiple states.

The value of the Registry is diverse and cannot be overstated. Ultimately, the New Hire Registry has saved and continues to save taxpayer dollars by increasing the self-sufficiency of custodial parents, ensuring for more efficient payments and collections to child support and decreasing instances of fraud by recipients of various assistance programs within and throughout states.

Employers seeking more details on how to report new hire information can consult the DWS Employer's Handbook at: https://jobs.utah.gov/ UI/Employer/Public/Handbook/EmployerHandbook.aspx